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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,312	04/05/2001	Hiroshi Wanibuchi	83020.0002	6572

26021 7590 07/09/2002

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EXAMINER
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TRAN, LY T

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 07/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/828,312	WANIBUCHI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ly T TRAN	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_.  
 2a) This action is FINAL.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-24 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 14-23 is/are allowed.  
 6) Claim(s) 1-3, 5 and 24 is/are rejected.  
 7) Claim(s) 4 and 6-13 is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.  
 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.  
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) The translation of the foreign language provisional application has been received.  
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) Notice of References Cited (PTO-892)                  4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_.  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                  5) Notice of Informal Patent Application (PTO-152)  
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5\_6.                  6) Other:

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regard

It's unclear that the length (L2) of a portion of the second wiping member projecting from the first supporting member is shorter than a length (L1) of a portion of the second wiping member projecting from the second supporting member. In figure 6A-6C, clearly shows that the length (L2) of a portion of the second wiping member projecting from the first supporting member is larger than a length (L1) of a portion of the second wiping member projecting from the second supporting member.

### ***Claim Objections***

2. Claim 14 is objected to because of the following informalities: spelling "engges" should be "engages". Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Holbrook (USPN 5,663,751).

With respect to claim 1, Holbrook discloses a cleaning device for cleaning a nozzle surface of an ink jet head (Column 2: line 30-51) comprising:

- A first wiping member for wiping the nozzle surface (Fig.6: element 75)
- A cleaner lever for supporting the first wiping member (Fig.6: element 61)
- A lever driving mechanism moving the first wiping member between a retracted position located away from the nozzle surface and a wiping position for wiping the nozzle surface (Column 5: line 31-54)
- A flat plate form second wiping member formed of an elastic body arranged within a moving path of the first wiping member so as to contact with the first wiping member (Fig.6: element 83)

With respect to claim2, Holbrook discloses:

- The first wiping member (75) is designed to move between the retracted position and wiping position located above retracted position, by moving a cleaner lever (Fig.6)

- The second wiping member is arranged above the retracted position and below the wiping position (Fig.6)

With respect to claim 3, Holbrook discloses the cleaner lever has a third wiping member, which is able to contact with the second wiping member while the cleaner lever is moving (Fig.6: element 77).

With respect to claim 5, Holbrook discloses a tip end surface of the first wiping member comes in contact with a side surface of the second wiping member (Fig.5: element 75,83, Column 5: line 6-10).

With respect to claim 24, Holbrook discloses:

- An ink jet head (Fig.6: element 1)
- A cleaning device which is arranged offsetting from a printing region of the ink jet head (Fig.6).

### ***Allowable Subject Matter***

4. Claim 4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

5. Claims 6-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 6-13 appear to be allowable over the prior art of record because at least the prior art has not been found to anticipate or disclose or teach the combination of a lever driving mechanism includes a friction type clutch lever which is frictionally engaged with one of gears constituting the gear train by means of a predetermined biasing force and is arranged coaxially with the gear and a tooth portion formed on the clutch lever which engages with the gear train when the clutch lever is in a predetermined rotational angular range.

6. Claims 14–23 are allowed.

- a) The primary reason for the allowance of claims 14-20 is the inclusion of an apparatus of a cleaning device comprising a combination of a lever driving mechanism includes a friction type clutch lever which is frictionally engaged with one of gears constituting the gear train by means of a predetermined biasing force and is arranged coaxially with the gear and a tooth portion formed on the clutch lever which engages with the gear train when the clutch lever is in a predetermined rotational angular range. It is this structure found in each of the claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.
- b) The primary reason for the allowance of claims 21-23 is the inclusion of a combination of apparatus of a cleaning device comprising a lock lever for locking the ink jet head at a predetermined position and a second cam mechanism from converting rotation of clutch lever into movement of the lock lever. It is this structure

found in each of the claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kobayashi et al. (USPN 5,898,444) discloses a frictional clutch moves the blade operating lever up and down (Fig.7: element 131, Column 11: line 27-31). However, this frictional clutch does not have a tooth portion which engages with the gear train when the clutch lever is in a predetermined rotational angular range.
- Takahashi et al. (USPN 5,798,775) discloses the lock lever (Fig.4: element 430). However, this lock lever does not lock the ink jet head at a predetermined position as the present invention.
- Nojima et al. (USPN 5,065,158) discloses a wiper (301) with first support member (301B) and second support member (301A) in figure 4C-4D. However, this wiper (301) cleans the surface of nozzle, not wipe against another wiper as present invention.
- Kida et al. (USPN 5,717,445) discloses a wiper (1A) with first support member (2B) and second support member (2A) in figure 1. However, this

wiper (1A) cleans the surface of nozzle, not wipe against another wiper as present invention.

- Sasaki (JP 06-143597) a wiper (34) with first support member (33) wipes against another wiper (27) in figure 6 and 7. However, Sasaki et al. does not teach the length a portion of the wiping member projecting from one supporting member is shorter than the length a portion of the wiping member projecting from other supporting member.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T TRAN whose telephone number is 703-308-0752. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0967.

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*July 1, 2002*

*JBarlow*  
John Barlow  
Supervisory Patent Examiner  
Technology Center 2800